United States Patent [19]

Iguchi

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[54] STABILIZED POWER SUPPLY CIRCUIT

[75] Inventor: **Yasuhide Iguchi**, Tsurugashima, Japan

[73] Assignee: **Toko, Inc.**, Tokyo, Japan

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[30] **Foreign Application Priority Data**

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[51] **Int. Cl.**[2] **H02M 3/335**

[52] **U.S. Cl.** **363/20**

[58] **Field of Search** ..... 323/17, 22 T, DIG. 1; 363/18, 19, 20, 21, 97; 331/112

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Primary Examiner—William M. Shoop

Attorney, Agent, or Firm—Schwartz, Jeffery, Schwaab, Mack, Blumenthal & Koch

[57] **ABSTRACT**

In a stabilized power supply circuit including a feedback circuit, wherein there alternately occur a time during which a current is caused to flow in a transformer so that energy is stored therein and a time during which the energy stored in the transformer is discharged, there is provided a compensation winding adapted to produce an induced voltage in accordance with an input voltage variation. The induced voltage is employed to correct an output voltage variation which is caused by the operating resistance of the feedback circuit for the time during which energy is stored in the transformer. The feedback circuit may be constituted at least by a Zener diode, control transistor and switching transistor, and the emitter of the control transistor may be grounded through the compensation winding. Thus the stability of the output voltage with respect to input voltage variations can be greatly improved. The compensation winding may be provided at any desired position in the feedback circuit.

11 Claims, 8 Drawing Figures